National Aeronautics and Space Administration

AeroSpace Frontiers

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Employees honored with Glenn's prestigious awards

BY S. JENISE VERIS

The Center announced winners of three prestigious Glenn awards on May 26 following a weeklong display of their unique and varied contributions to advancing technology and world-class research.

The Parametric Inlet Team led by **Paul Solano**, Mechanical and Rotating Systems Branch, with **Michael Ernst,** Aircraft Operations Office; **John Saunders** and **John Slater**, Inlet Branch; **David Root**, Central Process Systems Engineering Branch; and Techland Research's **Bobby Sanders** and **Lois Weir** won Glenn's coveted engineering award—the Steven J. Szabo Engineering Excellence Award. They are recognized for conceiving and fabricating the Parametric Inlet, an advanced supersonic external compression inlet design that features a unique hull concept for rapid hardware changeovers between test configurations of aircraft engines. The inlet is the culmination of teamwork across a wide matrix of disciplines.

Ken Guinta, Metals Technologies Branch, and **Herb Lawrence** and **Richard Minter,** Prototype Development Branch, are members of the Revolutionary Approach to Time Critical Long Range Strike (RATTLRS) Inlet Fabrication Team who won the Craftsmanship Award for Manufacturing.

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Photos by S. Jenise Veris

The Steven J. Szabo Engineering Excellence Award winners (left, front to back) Weir, Root, Solano, Ernst (right, front to back) Slater, Sanders, and Saunders pictured with their uniquely designed parametric inlet.

Divisions merge for efficiency

BY DOREEN ZUDELL

Daniel Gauntner, chief of the Engineering Systems Division (ESD), doesn't have a crystal ball. But he does see the value of planning ahead to meet current and projected challenges. The greatest challenge for Gauntner and his staff is molding two prominent divisions—Systems Engineering and Engineering Development—into one effective and efficient organization.

"With budget reductions and manpower realignments, merging these divisions gives us the flexibility to maintain our technical capabilities and ensure quality participation in NASA's mission directorate activities," he explained. Gauntner, whose Glenn career spans 36 years, began transitioning the two divisions into one in January. ESD became official last month.

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Inside

Twelve receive FEB awards

Twelve Glenn employees were honored with the Federal Executive Board's Wings of Excellence award on May 6 at the Marriott Hotel Key Center in Cleveland. The award recognizes employees whose outstanding performance, either on or off the job, have served as an inspiration to others and/or brought credit to the Federal service. Awardees are recognized for job performance, community service, or both.

Dr. Michelle Bright, Controls and Dynamics Branch, was recognized for her technical leadership in development of control technology for aeropropulsion systems as well as for leading and supporting programs to encourage young girls to pursue careers in math and science.

Dr. David Davis, Inlet Branch, was recognized for his research in fundamental supersonic flow with a wide range of Glenn organizations and Government agencies as well as his mentorship to young people in and outside of NASA.

Daryl Edwards, Thermal and Fluid Systems Branch, was recognized for his contributions towards the development of microgravity science experiments for both the shuttle and the International Space Station as well as his work with the North Ridgeville City Schools Endowment Fund, which provides grants for school enrichment programs.

Lawrence Greer, Optical Instrumentation and NDE Branch, was recognized for his technical contributions to space science missions as well as his dedication to community outreach particulary to the For Inspiration and Recognition of Science and Technology program.

Susan Hennie, Research and Technology Directorate, was recognized for her efforts as the Center lead for the Centennial of Flight Program where under her direction Glenn participated in Agency-sponsored Centennial activities to celebrate the first 100 years of powered flight.

Erick Lupson, Services and Construction Branch, was recognized for his involvement in successful construction projects that have supported the overall institutional and research needs for the Center as well as his willingness to serve his country as a master sergeant with the Air Force Reserves.

Linda McMillen, Enterprise Environments Branch, was recognized for her dedication to improving business through the use of desktop tools as well as her efforts in improving the workplace and community through outreach.

Kenneth O'Connor, Glenn Safety Office, was recognized for working with members of Glenn's safety, health, and environmental community to make improvements to the Glenn Safety Program as well as his role as leader and facilitator in Glenn's cultural change efforts.

Dr. John Pouch, Antenna, Microwave and Optical Systems Branch, was recognized for his contributions to Glenn's research programs in thin film etching and disposition, and work with small businesses, as well as his outreach efforts for children and youth within NASA and the state of Ohio.

Erline Trsek, CIO Business Office, was recognized for fundraising efforts through which she has made contributions of over $10,000 in 2 years to various charities as well as for leading and mentoring women and youth through Glenn-based outreach activities.

Daniel White, Environmental Management Branch, was recognized for conceiving and bringing to reality the Aerospace Environmental Traveling Exhibit, an outreach bus that has traveled to over 230 air shows, fairs, and schools since 1998.

Kenneth Zaremba, External Programs Directorate, was recognized for conducting successful management improvement studies, organizational analysis studies, and coordinating marketing activities for Glenn's Engineering and Technical Services Directorate, including Plum Brook Station, as well as supporting Center-level initiatives aimed at cultural transformation and community relations. ◆


Dr. Bright


Dr. Davis


Edwards


Greer


Hennie


Lupson


McMillen


O'Connor


Dr. Pouch


Trsek


White


Zaremba

Glenn contributes to Closing the Circle award

Glenn's Transportation Officer Susan Kraus, Logistics and Technical Information Division (LTID), proudly attended the White House Closing the Circle Award ceremony on June 14 where NASA was recognized for its efforts toward environmental conservation.

NASA won in the "Energy Efficiency in Transportation—Civilian" category for progress made by the NASA Motor Vehicle Efficiency Team in its work with alternative fuel vehicles (AFV). The Agency exceeded the requirement that 75 percent of all vehicle acquisitions be an AFV. They also earned credits for the use of B20 biodiesel fuel in their diesel-powered vehicles, generators, and other equipment.

Glenn continues to set the pace for the Agency is the use of AFV, said Kraus. About half of the Center's fleet of 135 vehicles, ranging from sedans and trucks to golf carts and snow plows, operate on alternative fuels.

NASA also met the Executive Order goal of a 1-mile-per-gallon (mpg) fuel economy increase in fiscal year (FY) 2002 and is making significant progress toward meeting the goal of a 3 mpg increase by FY2005. Additionally, NASA is on track to meet the FY2005 requirement that alternative fuels account for more than 50 percent of the total fuel used.

Kraus said Glenn is doing its part to help the Agency meet or exceed its requirements for 2005. "As of April 2005, 60 percent of Glenn's fuel usage was in alternative fuels," she explained. ◆

C-2005-706 Photo by Marvin Smith

The LTID transportation team, standing, left to right: Don Szmania, Transportation Operations; Kraus; Jeanine Hanzel (SGT), Logistics manager; Tim Debth, Motor Vehicles officer; Hugh McLaughlin, Fuels Distribution; kneeling: Pat Spohn (SGT), Garage Service manager; and Todd Strawser (SGT), Fuels Distribution supervisor.

The STS–114 patch signifies the return of the space shuttle to flight and honors the memory of the STS–107 *Columbia* crew with the constellation of seven stars. STS-114 crew members' names highlight the patch that also includes the red Sun on the orbit signifying the Japanese Space Agency's contributions to the mission and to the International Space Station (ISS) program. The shuttle plume represents the broad spectrum of challenges for this mission, including shuttle inspection and repair experiments, and ISS resupply and repair. The dominant design element of the STS-114 patch, however, is the planet Earth, which represents the unity and dedication of the many people whose efforts will enable the shuttle to safely return to flight.

New division offers flexibility

Continued from page 1

With more than 200 engineers from a broad range of engineering disciplines and 60 engineering technicians skilled in advanced manufacturing technologies and applications, ESD offers services from concept to completion. Some of its technical capabilities include systems engineering and integration, concept and development, concurrent engineering, and engineering design and hardware development utilizing four high-tech laboratories.

Under the new division, flexibility is key to appropriately staffing projects, which is done one of two ways: matrix management or co-location. Under a matrix management model, engineers and technicians maintain their current managers within the division, but are assigned to projects throughout the Lab on a short-term, "as needed" basis. A co-location concept, ideal for projects lasting a few months to several years, requires that employees relocate to the appropriate facility or office and provide support on a full-time basis.

Gauntner knows the importance of customer focus and providing what he calls a "single entry point into whatever customers require from ESD." Simply log onto the Web Information System for Engineering (WISE), http://amicus.grc.nasa.gov/WISE/ and fill out a task request.

"Centralized data collection ensures that requests are handled in an organized and timely manner," Gauntner said. "And with 11 branches within ESD, we'll always know what the left hand is doing."

For more information about ESD and a list of contacts, visit the Web site at http://www.grc.nasa.gov/WWW/SED. ◆

Physics fun

Glenn and the National Center for Space Research collaborated with Cedar Point in Sandusky and Geauga Lake in Aurora for the annual Physics Day activities on May 19 and 20. Glenn provided learning activities at both Physics Day events, during which high school students applied physics concepts to solve problems involving amusement park rides. Students also watched demonstrations presented by members of Glenn's Exploration Systems Division to learn how science applies to amusement park fun. Native Clevelander Astronaut Dr. Don Thomas spoke with students during both events, relating concepts students learned in school to real life problems.

Photo by Richard DeLombard

Photo by Renee Barrett

Step it up

Over 235 Glenn employees participated in the Annual Step Out on May 18. Employees walked a minimum of 1.4 miles and participated in blood pressure screenings. Sponsored by Singleton Health Services, this event was in honor of National Employee Health and Fitness Day and the 1st Annual Healthy Ohioans Fitness Walk. Pictured taking blood pressure screenings are registered nurses Cheryl Gradert (front, standing) and Patty Oleksiak (back, standing) SHS/Occupational Medicine Services.

Solar sails, take two

Plum Brook Station turned research up a notch with the recent testing of two 66-foot-long solar sail propulsion system designs in the Space Power Facility (SPF).

Last summer, the facility engineers completed 10-meter-scale testing of one of two designs under NASA's In-Space Propulsion Program (see *AeroSpace Frontiers*, November 2004). The latest tests challenged two 20-meter scale versions from California-based engineering firms, L'Garde, Inc., of Tustin, and ATK Space Systems of Goleta.

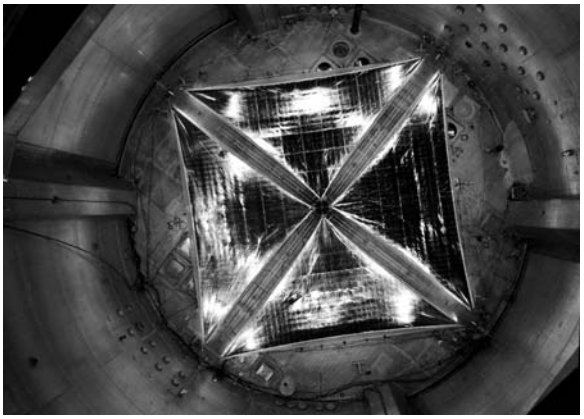
SPF Facility Manager Jerry Carek said the delicate nature of the hardware was the most challenging aspect of testing. An enormous structure made of lightweight reflective material 40 to 100 times thinner than a piece of writing paper, a solar sail is a viable alternative to conventional propulsion systems for interplanetary flight. When deployed, the sail looks similar to a kite and is supported by a lightweight, rigid framework called a boom. Streams of solar energy particles, or photons, bounce off the sails propelling it through space, just like the wind pushes a sailboat across water.

A team from Glenn, NASA Marshall, NASA Langley, and the two firms tested the solar sails' design performance in the areas of strength, stiffness, and behavior to see what improvements must be made before flight. The tests required a simulated space environment big enough to accommodate the vast, delicate sails.

"We had to handle the material with extreme caution when pumping air in and out of the vacuum chamber," Carek said. "Almost as light as air itself, the sails could be disturbed by the breeze from your body moving near them."

Carek said these tests are important milestones in the development of state-of-the-art propulsion technology that will use the Sun's energy for future robotic space missions.

Photo by Quentin Schwinn



A four-quadrant solar sail system, measuring 66 feet on each side, undergoes testing in the SPF, the world's largest vacuum chamber.

For more details on this testing, visit http://www.nasa.gov/centers/glenn/testfacilities/Sailing_on_Sunbeams.html or http://inspacepropulsion.com. ◆

Ask the Director

The following questions were chosen by the Director as a sampling from the *Ask the Director* Web site.

Q. Is it possible to have someone from our Office of Human Resources elaborate on the Reemployment Priority List (RPL)? It seems to be something that would give "surplus" or "displaced" Federal employees some slight advantage in seeking employment with other government agencies. . .

A. The Reemployment Priority List (RPL) is the mechanism an agency uses to provide reemployment consideration to former career and career-conditional employees the agency has separated because of (1) reduction in force or (2) compensable injury or disability where recovery takes more than 1 year from the time the employee began receiving compensation. Each agency keeps their own RPL listings. Only eligible former employees of the respective agency can be entered on its RPL listing. Therefore, you would not be considered eligible to apply to another agency's RPL list. If interested in opportunities at other Federal agencies, visit the following Web site for job postings: http://www.usajobs.gov. As a part of our continued efforts to keep the workforce informed with the latest information, the answer to this question as well as all others that deal with this topic will be posted as part of an expanded Frequently Asked Question (FAQ) page at the Office of Human Resources and Workforce Planning Web site http://www.grc.nasa.gov/WWW/OHR/Transformation/.

Q. I went to the Main Cafeteria today and had to pay taxes on my food. I asked if I had to pay tax if I did not eat at the cafeteria and was told yes. Could you please explain why this is?

A. When the Glenn Exchange ran the cafeteria, there was no sales tax because the Exchange is an instrumentality of the Federal Government and therefore was not subject to state sales tax laws. Just as goods purchased from an exchange (Federal Government instrumentality) on a military installation are not subject to state sales tax. Now that a private company operates the cafeteria, Acorn Food Services, Inc., state sales tax laws do apply. Consequently, the cafeteria is now charging sales tax only when food is purchased and consumed in the dining room. However, there is no sales tax for carryout. Acorn Food Services did charge sales tax for carryout food during the first 3 days of operation before the error was communicated and corrected. To compensate for the error, Acorn offered a free 16-ounce NASA bottled water or canned soda with any purchase on May 27, 2005. ◆

News Notes

LESA MEETING: LESA/IFPTE, Local 28, will hold its next monthly membership meeting on Wednesday, July 13, at noon in the Employee Center, .

SUMMER FIESTA: Glenn's Hispanic Advisory Council (HAC) is hosting its Summer Fiesta 2005 on Friday, July 22, from 4 p.m. to midnight at the picnic grounds. Special entertainment will be provided by Noel Quintana's Latin Crew, one of Cleveland's leading salsa and Latin jazz bands. Come and enjoy authentic food and music—and lots of fun—for just $17 for adults and $8 for children between 4 and 11 years of age; children under 3 are free! Glenn employees, their families, and friends are welcome. For more information, contact Ruben Ramos at 216–433–6663 or via e-mail at Ruben.J.Ramos@grc.nasa.gov.

THIRD SATURDAY AT THE VC: On Saturday, July 23, Glenn's Visitor Center will present a Space Memorabilia Show in collaboration with collectSPACE.com from 9 a.m. to 4 p.m. Collectors are invited to display their collections in the VC Auditorium and designated exhibit areas. They may also sell or swap space memorabilia. Free photos will be available at the "Picture Yourself in Space" digital photo booth. For more information, call 216–433–9653 or visit http://visit.grc.nasa.gov.

FACILITY TOUR: Visitors can enter the "Dome of Silence" on August 6 during a public tour of Glenn's Aero-Acoustic Propulsion Laboratory. One-hour tours of Glenn research facilities are conducted on the first Saturday of each month. For further information, contact 216–433–9653.

WOMEN RETIREE LUNCHEON: The next luncheon for Lewis/Glenn female retirees will be Thursday, August 18, noon, at Clementine's, (Garden Room, on the first floor), 8092 Columbia Road, Olmsted Falls. For more information, contact Mary Anne Mulroy at 440–331–3408.

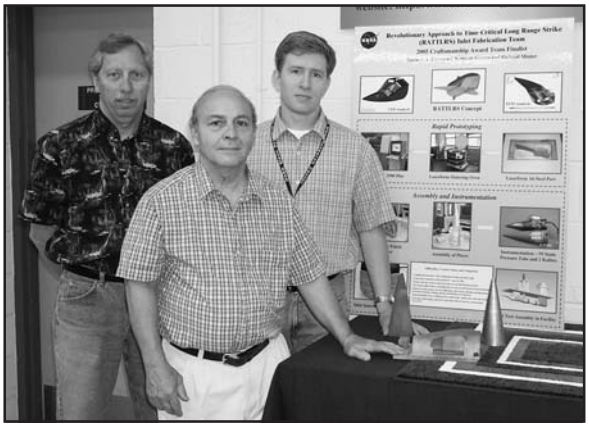
HBCU/OMU Conference at OAI

The 12th Historically Black Colleges and Universities (HBCUs) and Other Minority Universities (OMUs) Research Conference will be held July 13 and 14 at the OAI. The conference will highlight the collaboration of Glenn researchers with HBCU/OMU students in the areas of propulsion, microgravity, materials, photovoltaics, batteries, sensors, and more. Oral and poster presentations will provide progress reports of Glenn-sponsored research. In addition, Glenn's Job Fair will be held concurrently at OAI. Summer interns are encouraged to participate to learn about co-op opportunities. For more information, call Dr. Sunil Dutta at 216–433–8844. Contact Judy Drabik at 216–433–2487 regarding Glenn's Job Fair.

Research advances technology

Continued from page 1

They were recognized for creativity and flexibility in adapting several fabricating processes to apply unfamiliar metallic materials in the construction, assembly, and instrumentation of an inlet model for testing in the 1-by 1-Foot Supersonic Wind Tunnel.



Above: Craftsmanship Manufacturing Award winners Lawrence, Guinta, and Minter. Right: Brodkowski, Craftsmanship Assembly and Buildup winner.

Photos by S. Jenise Veris

John Brodkowski, Prototype Development Branch, earned the Craftsmanship Award for Assembly and Buildup. Brodkowski, working in collaboration with Army helicopter engineers from the Corpus Christi (TX) Army Depot, Glenn, and the U.S. Army Research Lab, recommended instrumentation techniques and then designed, fabricated, and installed 90 percent of the 236 pieces of instrumentation sensors custom-fitted for the T–700 engine's compression system. This engine is used for the Active Stall Control Engine Demonstration (ASCED) Program.

Dr. Mary Ann Meador, Materials Division, received the Abe Silverstein Medal for her research on improving battery performance characteristics. The award recognizes her outstanding research and development of a series of rod-coil block copolymers with improved ionic conductivity and cost-saving features widely recognized for practical applications, including lithium ions for lithium polymer batteries or protons for use in fuel cells. These new copolymers could lower manufacturing costs and increase battery safety to meet future aerospace application requirements, e.g., planetary orbiters, landers and rovers; geosynchronous orbiting and low-Earth orbiting spacecraft; astronaut equipment; and reusable launch vehicles. ◆

Dr. Meador

Asian/Pacific Islanders Heritage Awareness Month

An exhibit of pride and culture

BY S. JENISE VERIS

C-2005-810

Deputy Director Rich Christiansen presents a plaque of appreciation to Lai for her participation at the observance.

Lynna Lai, co-anchor of Cleveland's 19 Action News, enhanced a colorful display of art, dance, and food at this year's Asian/ Pacific Islanders Heritage Day Celebration. As featured speaker, Lai offered humorous insight into growing up near a military base in New Orleans and how she strugged to grasp her identity as an American-born Chinese.

"Success is never born of narrow-mindedness. Role models give birth to dreams of success and provide the shoulders for our youth to stand on," Lai said, recalling the role models that made the difference in her life.

Photos by Michelle Murphy

C-2005-747

Fonda Yeh performs on the Zither, a traditional Chinese instrument.

Lai talked about harmony in the home, expectations of excellence established by her immigrant parents that helped shape her "can do" attitude, and news reporter Connie Chung's example of success that allowed Lai to dream of her own career as a news broadcaster. Lai noted, however, that it was Channel 19's bold steps to embrace diversity in programming and hiring that gave her the opportunity to become the first Asian TV news anchor in this area in 2003.

Lai encouraged members of Glenn's Asian community to become role models in their own communities for the youth and to help bridge the gap of diversity. "While modesty is a characteristic of Asian culture, we need to get out in the community and toot our own horn because we have much to offer."

Glenn's Asian/Pacific Islanders Advisory Council and the Equal Opportunity Office cosponsored this annual event. ◆

Series draws record-breaking crowds at VC

BY DOREEN ZUDELL

Glenn's Third Saturday series is helping make the Visitor Center (VC) one of Cleveland's popular family attractions. Since January, nearly 8000 visitors of all ages have attended these programs that offer a unique, informal learning experience—that's a lot of fun.

Cheryl McCallum (BTAS), part of the VC team who coordinates the Third Saturday series, said visitors respond well to topics that connect with current events in and outside of NASA. "Planets in the News," "Vision for Space Exploration," "Cars in Space—The NASA Auto Show," and "Ohio Astronauts" (featuring native Clevelander Dr. Don Thomas) are just a few programs that filled to capacity. The series features expert speakers, science-based hands-on activities, souvenir photographs and handouts, and access to the VC galleries.

The VC has had success through partnerships with organizations outside of Glenn as well. For April's program, they partnered with the Lake Erie Nature and Science Center's Schuele Planetarium in Bay Village to present "Star Gazing." About 4500 visitors enjoyed a variety of presentations and guest speakers, including local meteorologist Dick Goddard, Solar System Ambassador and Planetarium Director Jay Reynolds, and Cuyahoga Astronomical Association members. Activities focused on comet making; choosing the right telescope; Mars and Cassini mission updates; and Twinkle Tots, a program designed for toddlers. Special nighttime hours allowed visitors to peruse the night sky with telescopes.

On July 23, the VC will collaborate with collectSpace.com to host a "Space Memorabilia Show and Swap Meet" where attendees can display their collections in the VC from 9 a.m. to 4 p.m.

"The Third Saturday program has become a vital way of connecting the public with the Center and for Northeast Ohio to take community ownership of the Lab," said VC's Michael Blair (BTAS). "We want people to know that there's much more to Glenn than the Hangar they see from the highway. The Visitor Center is a window into NASA and it's free! So tell your family, friends, and neighbors to come out for a day filled with fun activities."

For more details on the Third Saturday series and other VC events, visit the Glenn home page at www.nasa.gov/glenn, and click on "Glenn Events." ◆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(1) Children learn the safe way to look at the Sun. (2) Astronaut Dr. Don Thomas signs autographs after a presentation on Ohio Astronauts. (3) Schuele Planetarium Director Jay Reynolds and WKYC TV3's Eileen McShea participate in the Star Gazing program. (4) Bryan Palaszewski (back left) Combustion Branch, joins Trekkies during a Cars in Space program. (5) Children enjoy a rocket-making activity with VC volunteer Ken Kenipe. (6) Don Palac, Nuclear Technology and Demonstration Projects Office, talks about Vision for Space Exploration.

iTA helps remove any doubt

BY S. JENISE VERIS

Photo by S. Jenise Veris

Glenn Technical Warrant Holders Rohn, Jankovsky, and Shaltens. Not pictured is Banks, a recent selectee.

NASA has taken a significant step toward ensuring safe and reliable operation of future shuttle missions by establishing a position within the Agency known as the Independent Technical Authority (iTA). The iTA is structured so that those who have responsibility for the operations of high-risk technologies have an equal voice in the process of determining technical and safety readiness.

As the iTA, NASA's Chief Engineer Rex Geveden leads the Agency's challenge of renewing a technical conscience independent of program schedules or costs. Last year, former Administrator Sean O'Keefe implemented the iTA as part of the Agency's Transformation following the recommendations of the Columbia Accident Investigation Board and the Presidential Commission on Implementation of U.S. Space Exploration Policy.

Geveden has sole waiver-granting authority for establishing, approving, and maintaining technical standards across the Agency. He has developed a technical warrant system to execute a robust iTA formal process that delegates technical authority to competent individuals at NASA field centers. Forty-two technical warrant holders across the Agency conduct and oversee high-risk technical work on a daily basis in order to ensure safe and reliable operations and missions. A warrant holder can be either assigned for a technical discipline or for the system integration of a total vehicle or program system.

Following a visit to Glenn in March, Geveden chose three technical warrant holders: Robert Jankovsky, Electric Propulsion Branch chief, holds a discipline warrant for electric propulsion; Dennis Rohn, Systems Engineering and Integration Branch, holds a systems warrant for Fluids and Combustion; and Richard Shaltens, Thermal Energy Conversion Branch chief, holds a discipline warrant for Nuclear Systems and Power Generation. More recently, Bruce Banks, Electro-Physics Branch chief, was selected a discipline warrant holder for Induced Environments—Chemical.

In order for warrant holders to fulfill their daily responsibilities, Center Director Dr. Julian Earls has authorized Glenn's Chief Engineer Jose Vega to manage the negotiations and documentation of iTA requirements by procuring trusted agents (TAs) who will provide support to Agency warrant holders. TAs act as the "eyes and ears" of a warrant holder. By suggesting technical assignments and training programs to ensure the technical skills of staff in the warrant holders' area remain current, TAs assist, when requested, in discharging a warrant's responsibilities. To date, 15 Glenn employees have been appointed TAs—half of which support warrant holders at other centers. They include:

- TAs for Glenn: Mike Patterson, Dave Manzela, George Soulas, Luis Pinero, Lee Mason, Mike Barrett, Jeff Schreiber, and Rick Wiedenmannott
- TAs for Langley: Dr. Damodar Ambur, Dr. John Gyekenyesi, Dr. Pappu Murthy, and Dr. Timothy Gabb
- TA for Johnson: James Yuko
- TA for Marshall: William Schoren
- TA for Stennis: James Zakany

"The iTA represents a cultural transformation in technical decisionmaking across the Agency," Vega said. "Identifying the technical warrant holders and TAs makes the technical community more aware that there is a process in place that will elevate an unresolved technical concern, exhausting normal channels, so that it reaches the highest level."

Vega plans to conduct dialogue sessions with all technical organizations at Glenn to increase employee awareness of the iTA process. Look for updates about iTA in NASA's *ASK Magazine* as well as training modules and workshops for technical warrant holders and TAs on *Today@Glenn*. ◆

NASA procurement awards

Glenn is a "triple-crown" winner of this year's NASA Procurement Person of the Year Awards. The three Procurement Division employees recognized among the nine Agency award recipients included **Karin Huth,** Supervisor of the Year, for outstanding support to the Agency, Glenn, and her branch, and leadership in developing the NASA Most Efficient Organization proposal for the NASA Shared Services Center effort; **Jean Boylan**, Simplified Acquisition Specialist of the Year, for excellent technical purchasing and customer relations skills, and for taking on additional assignments such as "Super User" for the SAP R/3 system; and **Steve Craig**, Contract Manager of the Year, for dedicated management of diverse contract activities and willingness to volunteer for special assignments and mentoring other contract specialists.

Pictured: Boylan, Craig, and Huth

Reaching out and reaching back

Two Glenn employees' legacies become realized

BY S. JENISE VERIS

Glenn will miss two dedicated individuals who supported the Educational Programs Office (EPO) in its outreach endeavors. Glenn's Dr. Willie (Karemi) Mackey and Frank Witcher, a support service contractor with Lockheed Martin Information Technologies, began working on projects initiated on behalf of underserved youths, but were unable to complete the projects due to their untimely deaths. With EPO's guidance, however, and support from coworkers and friends, the projects were realized.

Dr. Mackey, who served as an astrophysicist, was compelled to educate students about flight. "It was Mackey's dream to initiate an Explorer Post for high-altitude ballooning to inspire students to pursue flight-related careers," said Stephanie Brown-Houston, EPO's Explorer Post Program manager. Glenn collaborates with the Boy Scouts of America on three Explorer Posts that provide students (ages 14 through 20) with career exploration opportunities focused on aeronautics and computer science.

On April 9, Explorer Post 632–BalloonSat, dedicated to the memory of Mackey, successfully launched, tracked, and recovered three student-inspired balloon payloads that reached 98,000 feet. Mackey had designed the lesson plan and secured $2250 in seed money for the Post from the Ohio Space Grant Consortium.

Dr. David Snyder led the group of Mackey's coworkers in the Photovoltaic and Space Environments Branch who volunteered as mentors for the Post's inaugural year, which began 2 months after Mackey died. They include Philip Jenkins, Tom Morton, and David Scheiman from OAI. Zach Schwartz and Steve Hall, ANLX/Digital Communications Branch, also assisted.

"Between October and April, the students learned about the atmosphere, how to make measurements, how to design payloads to fit weight and power limitations, and how to track a balloon using Global Positioning System receivers and radios." Snyder explained. "They were exposed to the skills, technology, and design issues that occur when developing a real flight experiment."

Right: Glenn mentors and students of Explorer Post 632 at the April launch of the Balloon satellites. Below: Glenn alumni joined Witcher's family, friends, and East Cleveland school officials at the MAEL in congratulating the winners of the Best Aircraft Design competition (front and center), Arthur Hill and Kristian Webb from Heritage Middle School.

While Mackey's ideas involved studying flight, Witcher's objectives were more grounded. As team lead of NASA's Mobile Aerospace Education Laboratory (MAEL), Witcher wanted students of East Cleveland City Schools to have the same opportunities to tour and experience the mobile lab as those he served while traveling across the nation. The MAEL is a state-of-the-art classroom housed within a 53-foot trailer featuring 10 unique workstations designed to excite grades K–12 about careers in science, mathematics, and aeronautics.

After Witcher's passing, EPO worked with East Cleveland City Schools Superintendent Myrna Corley and Eric Brewer, Witcher's friend and Shaw High School classmate, to coordinate the project's logistics.

On Monday, April 25, Glenn's EPO Chief Jo Ann Charleston, East Cleveland School Board dignitaries, and Brewer participated in a kickoff ceremony that launched a week of activities held district-wide. The ceremony, held at Chambers Elementary School, included a Memorial Proclamation in honor of Witcher that was read by Superintendent Corley.

Student participation in the MAEL was determined by winning essays conveying "who and why" inspired them to pursue a career in science. Throughout the week, more than 250 students visited the MAEL, as did those from 2 after-school programs, and a number of adults from community outreach programs. The week's activities culminated in an award ceremony for the Best Aircraft Design competition with NASA alumni onhand to recognize the winners.

"It's always an incredible experience to participate in inspiring the next generation of explorers," said External Programs Director John Hairston. "The MAEL event was made even more meaningful by the support of several NASA employees who are alumni of the East Cleveland Schools district." ◆

People

Awards, Graduations, Patents

Beran

Michael Beran, MTI/ Central Process Systems Operations Branch, was recently certified as a Level III ISA Certified Control Systems Technician®. Beran is part of a team responsible for operation, maintenance, and repair of Glenn's Distributed Control System and Programmable Logic Controllers, a highly secure network of computers, controllers, and operator console with over 30,000 channels of controls and instrumentation.

de Groh

Kim de Groh, Electro-Physics Branch, is a recipient of the Rotary National Award for Space Achievement Foundation's Stellar Award "for outstanding contributions to the understanding and enhancement of spacecraft materials durability, as well as exceptional mentoring and outreach efforts." De Groh was presented the award during the National Space Trophy Dinner, hosted by the Johnson Space Center Rotary Club.

Dr. Juhasz

Dr. Albert Juhasz, Thermal Energy Conversion Branch, recently completed his dissertation and academic requirements for the Doctorate of Engineering degree at Cleveland State University (CSU). The dissertation is entitled "Analysis and Numerical Optimization of Gas Turbine Space Power Systems with Nuclear Fission Reactor Heat Sources." He is the first in the history of CSU to achieve a perfect score on the 4-hour mathematics examination.

Drs. Meador and Kinder

Dr. Mary Ann Meador and **Dr. James Kinder,** Materials Division, have been issued two U.S. Patents for invention of a series of block copolymers with a unique molecular structure. Patent #6,855,433 entitled "Mechanically Resilient Polymeric Films Doped With a Lithium Compound," describes a process to dope the films with lithium salts to create mechanically resilient polymeric films capable of lithium ion conductivity at a variety of temperatures. Patent #6,881,820 entitled "Rod-Coil Block Polyimide Copolymers" describes a family of polymers with a combination rigid rod/ flexible coil backbone. The rod portion provides mechanical integrity while the coil acts a carrier for a variety of ions. These polymers were developed as a solid polymer electrolyte for lithium batteries. Space Act Agreements with Eveready Battery Company and Ferro Corporation are ongoing to commercialize this material.

Jim Polaczynski, RSIS/Imaging Technology Center, won first place in the Production Category of NASA's Videographer of the Year competition. Polaczynski was recognized for his work on *Of Ashes and Atoms: A Documentary on the NASA*

Polaczynski

Continued on page 11

BPW awards scholarships

The 2005 Glenn's Business and Professional Women's (BPW) organization scholarship winners were announced at the Installation of Officers Dinner Meeting on May 26.

Rakic

Starcher

Desa Rakic and **Gail Starcher** each received a $450 scholarship to continue their studies. Rakic, a management support assistant in the Aeronautics Division, is majoring in Business Administration at Baldwin Wallace College. Starcher is the division secretary for the Logistics and Technical Information Division. She is working towards an associates degree in Business from Cuyahoga Community College.

To learn more about BPW and view the list of new officers installed for the 2005–2006 Program Year, visit http://www.grc.nasa.gov/WWW/Clubs/NASABPW/

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DEADLINES: News items and brief announcements for publication in the August issue is noon, July 15. The deadline for the September issue is noon, August 12. Submit contributions to the editor via e-mail, doreen.zudell@grc.nasa.gov, fax 216–433–8143, phone 216–433–5317 or 216–433–2888, or MS 3–11. Ideas for news stories are welcome but will be published as space allows. View us online at http://AeroSpaceFrontiers.grc.nasa.gov.

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People

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Plum Brook Station Reactor Facility, in what is considered the Agency's premier competition for videography. The 90-minute documentary was compiled from more than 100 hours of personal interviews and research combined with a pictorial history of NASA's only nuclear research reactor located at Plum Brook Station in Sandusky, OH.

Retirements

Bill

Robert "Bob" Bill, Vehicle Technology Directorate, U.S. Army Research Laboratory, retired on April 30, 2005, with 34 years of Federal service.

Nancy Piltch, Microgravity Division, retired on April 30, 2005, with 22 years of Federal service, including 21 1/2 with NASA.

Thomas Schneider, Research Testing Division, retired on April 30, 2005, with 41 years of Federal service, including 39 with NASA.

In Appreciation

I am so very grateful to all of you wonderful NASA folks for so generously donating your precious annual leave, and helping me through my illness. I recently completed my last surgery and am feeling better every day. Your gracious donations allowed me to concentrate on getting well without worries of paying "the bills." You are all truly extraordinary people and it is my immense privilege to know you! Thank you so very much.

—Emye Benavage

To all of you who were there with me and for me during the last year of my husband's life I simply say, thank you! Whether you donated time; sent cards, flowers, thoughts, or prayers...thank you!

— Linda Dukes-Campbell

NASA 2005 scholarships awarded

Two children of Glenn employees were awarded NASA College Scholarships for 2005–2006. The scholarship, renewable for a maximum of $8,000 over 6 calendar years, is restricted to dependents of NASA employees majoring in science or engineering.

Misra

Switala

Amit Misra, son of Dr. Ajay Misra, Ceramics Branch chief, and **Benjamin Switala**, son of Joseph Switala, Aero Power and Propulsion Technical Branch, were selected from 109 applicants Agencywide. Misra, 2nd out 586 in his class graduating at Strongsville High School, earned numerous honors including National Merit Commended Scholar, National Honor Society, and National Math Honor Society. He plans to study physics at Case Western Reserve University. Switala was valedictorian for North Olmsted High School's class of 2005. His academic honors include National Merit Finalist, Bausch and Lomb Honorary Science Award, and first place in the Ohio Art Criticism Open. He plans to study computer science at Massachusetts Institute of Technology.

In Memory

Zaldana's dedication was an inspiration

Following a long and courageous battle with cancer, Glenn Research Engineer Antonio "Tony" Zaldana, 49, passed away on June 8. He was well known and respected across the Center, first as an apprentice, then as a research laboratory mechanic, and finally as an engineer for the Oil-Free Turbomachinery team. Zaldana made many contributions to numerous aeropropulsion test cells in the Engine Research Building and most recently conducted research to understand and apply foil gas bearings to aero and space turbines.

Zaldana

Zaldana lived the concept of continuous learning and improvement. Raised in humble surroundings in Guatemala, he immigrated to the United States as a young, unskilled laborer. But through hard work and perseverance, Zaldana learned to speak English and became a journeyman mechanical technician, ultimately putting himself through night school to become an engineer. Prior to becoming ill, Zaldana was actively taking graduate courses towards a Masters of Engineering at Cleveland State University. His dedication to his family, his research team, and NASA has been an inspiration to many. Details on an educational trust fund for Zaldana's six children will be posted on *Today@Glenn* when finalized.

Ralph Faigen, 76, who retired in 1994 after 27 years of service, recently died. Faigen served NASA as a production controller prior to retirement.

Frank Klemencic, 62, who retired in 2001 after 37 years of service, recently died. Klemencic served NASA as an electrician prior to his retirement.

Ronald Roskilly, 73, who retired in 1994 after 37 years of service, recently died. Roskilly served as a supervisory AST in experimental facility technology prior to his retirement.

New cafeteria service stresses consistent quality

BY DOREEN ZUDELL

Acorn Food Services' Morris Schonhiutt, general manager of Glenn's cafeterias, would like to see the 700-plus employees who attended the Main Cafeteria's June 7 open house on a daily basis.

As Culinary Institute of Art graduates with a combined 40 years of experience in food service and catering, Schonhiutt and Executive Chef Mary Ann Lang will use their knowledge and creativity to build a strong customer base.

"Our goal is to achieve customer satisfaction," said Schonhiutt, "which means providing quality food on a consistent basis."

Since the Philadelphia-based company took over cafeteria operations May 1, Schonhiutt and his staff have been identifying customer food preferences by introducing a variety of items to the menu. Schonhiutt added that he and Lang work with registered dieticians to ensure healthy food choices.

Over the coming weeks, patrons can look forward to what Schonhiutt calls "action stations" where chefs will prepare foods, based on holidays or other themes, in designated areas throughout the cafeterias. An upscale salad bar, featuring 40-plus items, is also on the horizon. Schonhiutt will also continue offering quality, name brand items such as Sara Lee, Rich's, Starbucks, and Breyers, which were featured during the open house.

Photo by Doreen Zudell

Leo Taylor, head kitchen chef; Schonhiutt, general manager; Lang, executive chef; and Alonzo Thomas, grill chef, lead the team of Acorn Food Services professionals.

"We'll do a lot of creative marketing to make our cafeterias exciting places to visit," he said, "but our foundation will stay firm on fresh food prepared daily." Some of those mainstay items include signature soups that include ingredients that Schonhiutt's team shops "competitively" to ensure the best products for the money.

While Schonhiutt said patrons can expect to "taste quality" in the foods, he said "quality service" is also a top priority. "We have a staff of existing and new employees who have a great customer-service attitude," he explained, "and employees will see me walking throughout the cafeterias making sure their needs are met."

Acorn Food Services also offers an array of onsite catering services. For further information, call 216–433–2986/2987. ◆

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